

TALBOTS LANDING ROUTINE WATER AND SEWER EXTENSION

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

CAPITAL PROJECT No. W-8698

CONTRACT No. 14-4750

GENERAL NOTES

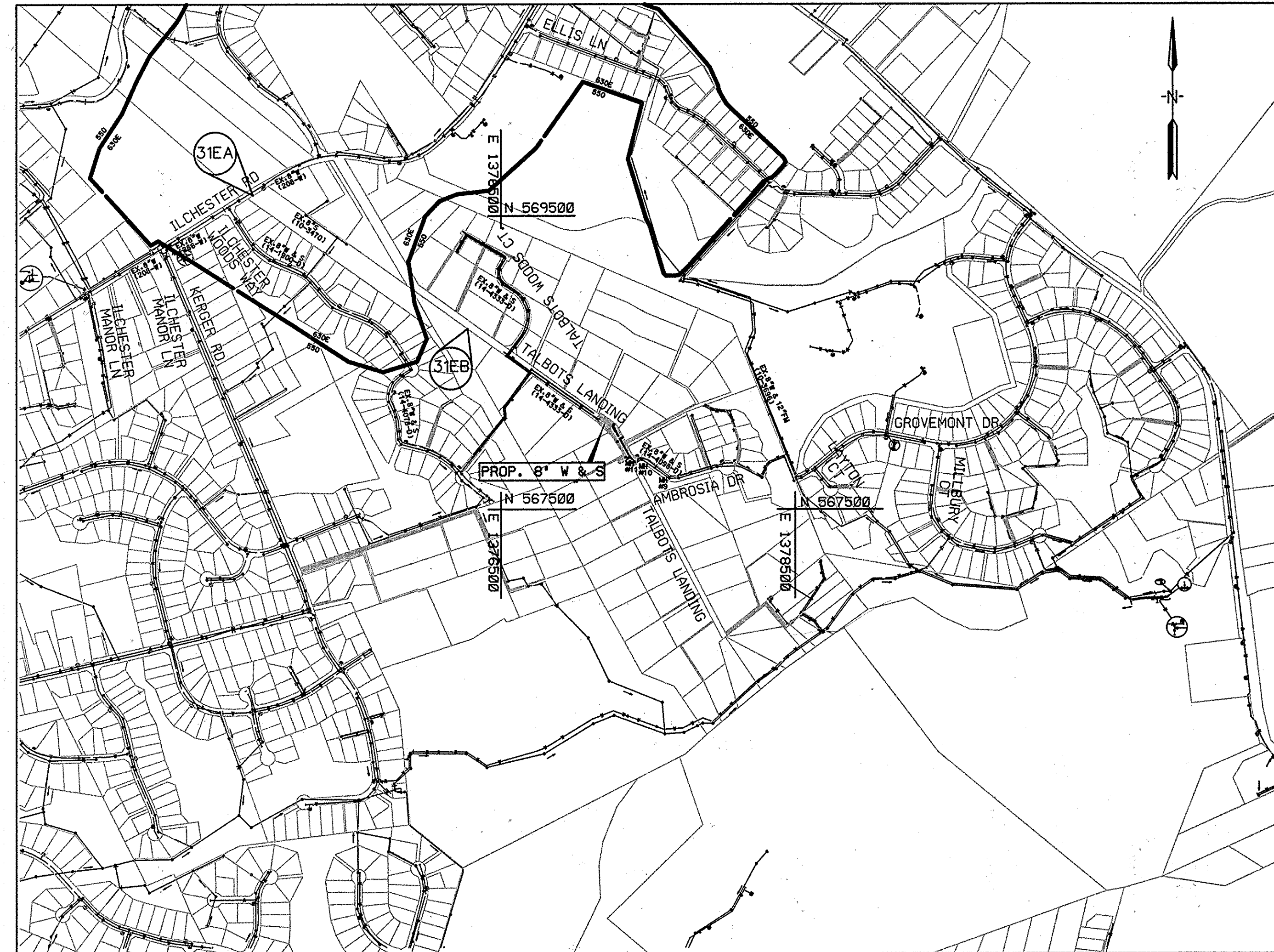
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR EXPENSE.
- TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON AUGUST 2011 BY KCI TECHNOLOGIES, INC.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS:
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/2007 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 31EA & 31EB. ALL VERTICAL CONTROLS ARE BASED ON NAVD 88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE REBAR & CAP.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER OF THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
AT&T.....1-800-252-1133
B&E (CONSTRUCTION SERVICES).....410-637-8713
B&E (EMERGENCY).....410-685-0123
BUREAU OF UTILITIES (DPW).....410-313-4900
COLONIAL PIPELINE CO.410-795-1390
MISS UTILITY.....1-800-257-7777
STATE HIGHWAY ADMINISTRATION.....410-531-5533
VERIZON.....1-800-743-0033
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)313-7450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OR BORING/JACKING OPERATION OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(A) OF THE HOWARD COUNTY CODE.
- THE CONTRACTOR SHALL PROVIDE SURVEY CONSTRUCTION STAKEOUT FOR ALL NECESSARY LINES, GRADES AND ELEVATION OF THE PROPOSED FACILITIES.
- THE CONTRACTOR SHALL PROVIDE STAGING/STORAGE AREA. THE WORK SHALL BE CONDUCTED UNDER STRICT ADHERENCE TO SECTION 308 - EROSION AND SEDIMENT CONTROL OF THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV.

WATER MAIN NOTES

- ALL WATER MAINS SHALL BE POLYVINYLCHLORIDE (PVC) PIPE MEETING THE REQUIREMENTS OF AWWA C900 DR18, PRESSURE CLASS 150 AND THE HOWARD COUNTY DESIGN MANUAL VOLUME IV- STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND ALL SUBSEQUENT AMENDMENTS THERETO.
- TOPS OF WATER MAIN SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- THE FOLLOWING NOTE IS ADDED TO HOWARD COUNTY STANDARD DETAIL W 2.22. BUTTRESS AND ANCHORAGE FOR VERTICAL BENDS, WHEN ANCHORING PVC PIPE, THE STRAPPING IN CONTACT WITH PIPE SURFACE SHALL BE 1-INCH WIDE BY 1/4-INCH THICK STEEL. THE REMAINING PORTION OF THE STRAP SHALL BE REINFORCING BAR SIZED IN ACCORDANCE WITH THE PERTINENT CHART SHOWN ON THE DETAIL.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANT SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD DETAIL. ALL FIRE HYDRANT LEADS SHALL BE POLYVINYL CHLORIDE (PVC) PIPE MEETING THE REQUIREMENTS OF AWWA C900 DR18 AND CONSTRUCTION IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV- STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF UTILITIES HOWARD COUNTY, 15 DAYS PRIOR TO WATER MAIN SHUT DOWNS.
- FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AWWA STANDARD C900 FOR PVC PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
- UNLESS OTHERWISE NOTED ON THE PLANS FOR IN THE SPECIFICATIONS, SEVENTEEN (17) POUND SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSES. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL TEES USED WITH PVC MAINS SHALL BE DUCTILE IRON.
- WATER MAINS SHALL BE FILLED WITH WATER AND BROUGHT TO 150 PSI HYDROSTATIC TEST PRESSURE AT THE LOW POINT FOR 2 HOURS.

SEWER MAIN NOTES

- ALL SEWER MAINS SHALL BE PVC UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED WITH M.T. IN PLAN AND PROFILE SHALL HAVE WATER TIGHT FRAME AND COVER. STANDARD DETAIL 05.52. WHERE WATER TIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL 'C.N.S.' INDICATES THAT THE CELLAR CANNOT BE SERVED.



VICINITY MAP

SCALE: 1" = 600'

TYPE OF BUILDING: RESIDENTIAL
NUMBER OF PARCELS: 5
NUMBER OF WATER HOUSE CONNECTIONS: 5
NUMBER OF SANITARY HOUSE CONNECTION: 5
DRAINAGE AREA: PATAPSCO
PRESSURE ZONE: 550
WATER TEST GRADIENT: 700

HOWARD COUNTY GEODETIC SURVEY CONTROL
THE HORIZONTAL AND VERTICAL DATUM BASED ON
NAD83/91 (HORIZONTAL)
NAVD 88 (VERTICAL)

31EA N 569641.16 31EB N 568731.02
E 1374818.01 E 1376273.55
ELEV. 468.84 ELEV. 452.62

DEVELOPER'S CERTIFICATION

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS.

HOWARD SOIL CONSERVATION DISTRICT CERTIFICATION:

"THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT (SCD)."

ENGINEER'S DESIGN CERTIFICATION

"I/WE CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

GUIHUA WANG
KCI TECHNOLOGIES
936 RIDGEBROOK RD
SPARKS, MARYLAND 21152

INDEX OF SHEETS	
SHEET No.	DESCRIPTION
1	TITLE SHEET
2	8" WATER & 8" SEWER PLAN & PROFILE
3	SEDIMENT CONTROL PLAN
4	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

QUANTITIES				
ITEM	UNIT	ESTIMATE	AS-BUILT	MATERIAL SUPPLIER
8" WATER	L.F.	397	400'	JM EAGLE / BRS C-900 DR-18
WHC	L.F.	122'	130'	K COPPER CAMBRIDGE LEE
8" SEWER	L.F.	252	250'	SDR-26 JM EAGLE / BRS
4" MANHOLE	EA	2	2	AMERICAST
4" SHC	L.F.	181'	185'	SDR-26 JM EAGLE / BRS
NO. OF WHC	EA	4	4	K COPPER
NO. OF SHC	EA	6	6	SDP-26
NAME OF UTILITY CONTRACTOR:				W.E. WILSON
				AS-BUILT DATE: JANUARY 15, 2013

RESTORATION SCHEDULE		
LOCATION	DISTANCE	TYPE
TALBOTS LANDING	398'	MACADAM

LEGEND	
PROPOSE	EXISTING
TRAVERSE POINT	DECIDUOUS TREE
WATER MAIN	CONIFEROUS TREE
SEWER MAIN	EXISTING FIRE HYDRANT
MANHOLE	EXISTING VALVE
SEWER HOUSE CONNECTION	EXISTING WATER MAIN
LIMIT OF DISTURBANCE	EXISTING GAS MAIN
SILT FENCE	EXISTING UNDERGROUND ELECTRIC
	EXISTING OVERHEAD SERVICE
	EXISTING SEWER MAIN

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 31363. EXPIRATION DATE: 1/16/2014.

AS-BUILT
DATE: 1/15/2013

PLOTTED: 08:23 AM on Tuesday, July 10, 2012
BY: Guihua Wang Division: P042 W-WW-Solid Waste Eng
FILE: M:\2007\0071378_40\drawings\007137840_SHEET 1.TITLE.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *Jay B. ...* 7/10/12
Chief, Bureau of Utilities: *Shirley C. ...* 7/10/12

Chief, Bureau of Engineering: *Thomas R. ...* 7/10/12
Chief, Utility Design Division: *...* 7/10/12

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

KCI
TECHNOLOGIES

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818
WWW.KCI.COM

STATE OF MARYLAND
PROFESSIONAL ENGINEER

... 7/10/12

DES: GW			
DRN: CK			
CHK: TW			
DATE: MARCH 2012	BY	NO.	REVISION

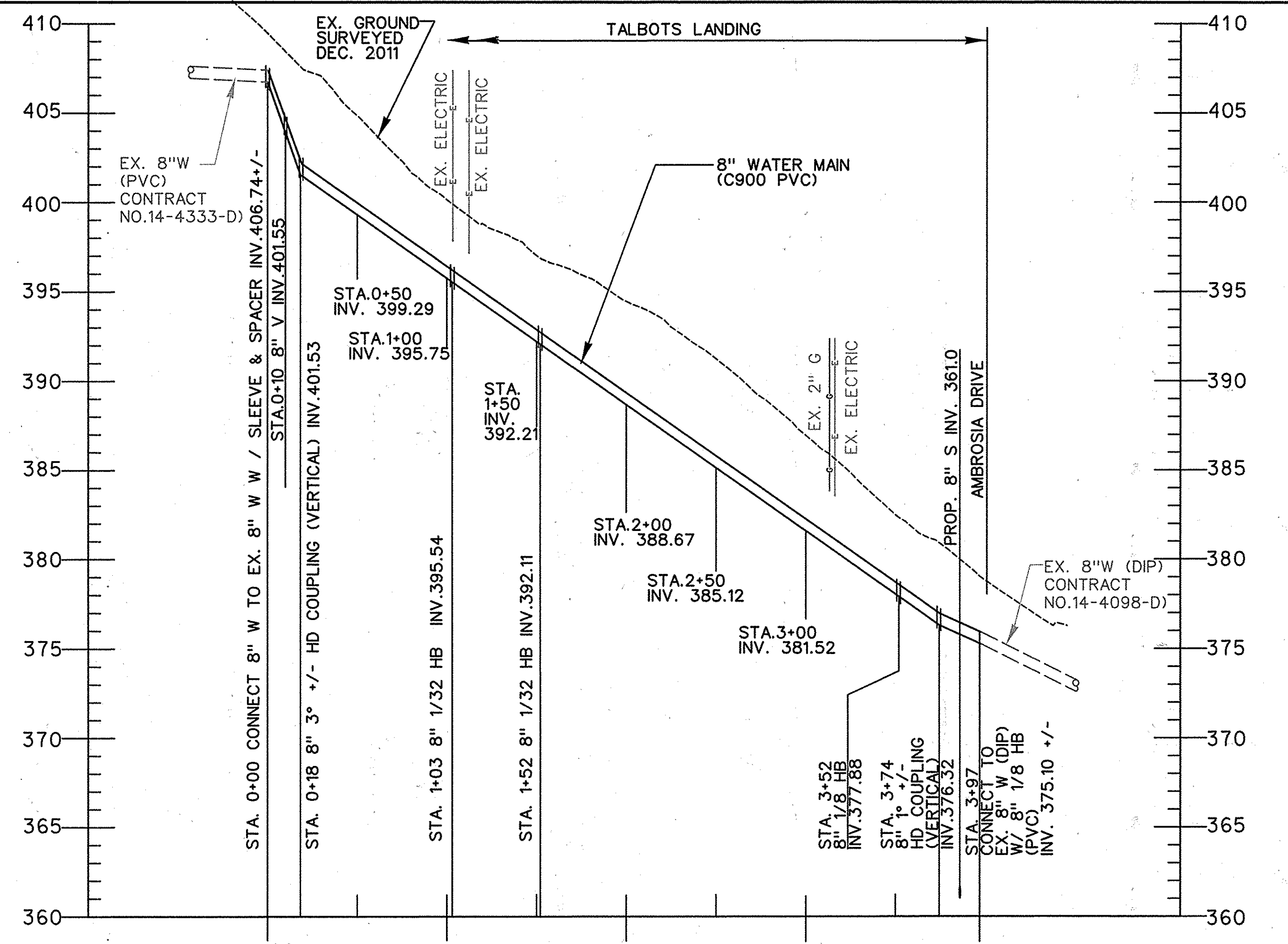
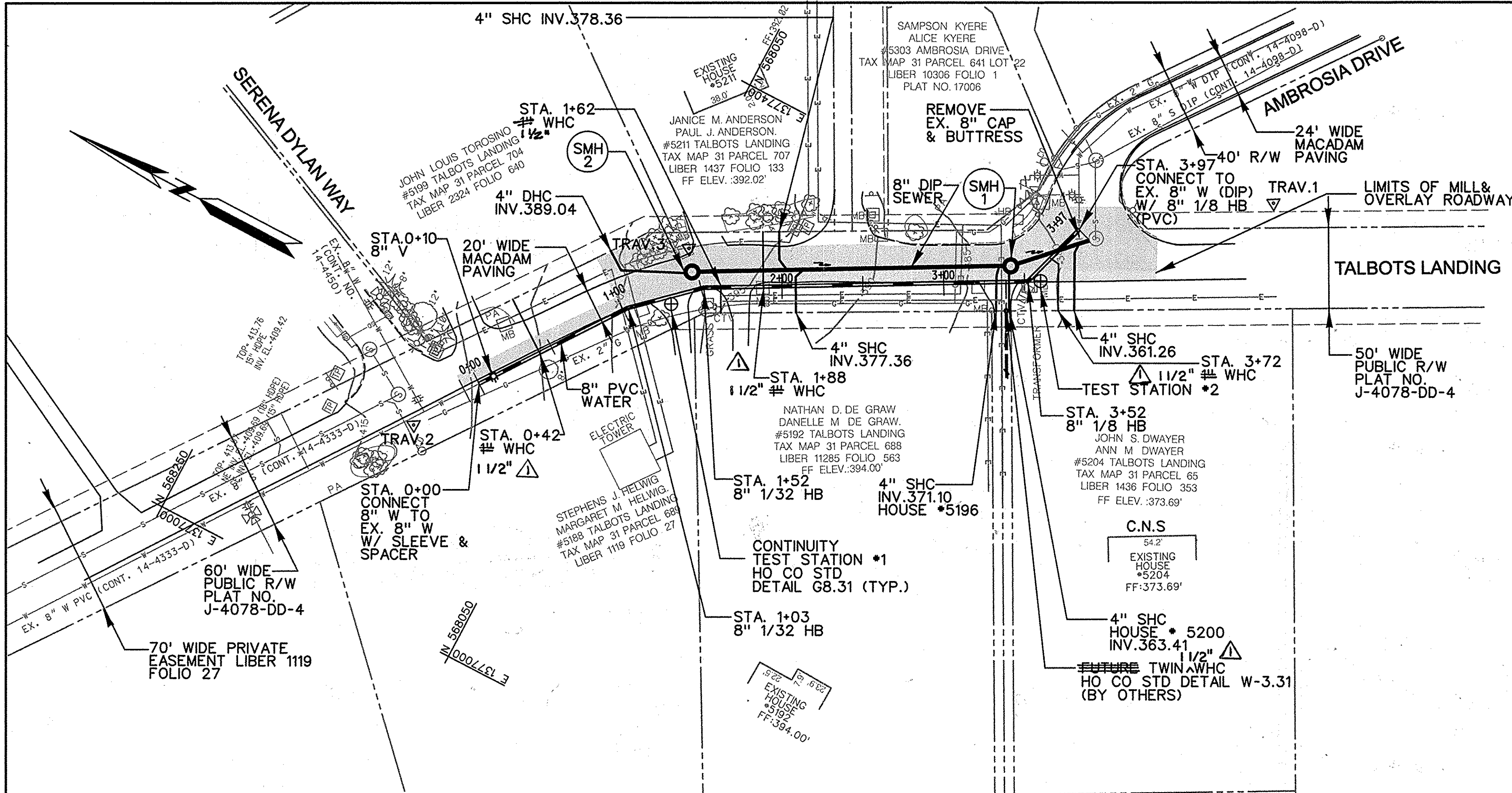
AS BUILT	1-15-2013	3-7-13
600' SCALE MAP NO. 31	BLOCK NO. 22	

TALBOTS LANDING ROUTINE WATER AND SEWER EXTENSION

CAPITAL PROJECT No. W-8698
CONTRACT No. 14-4750

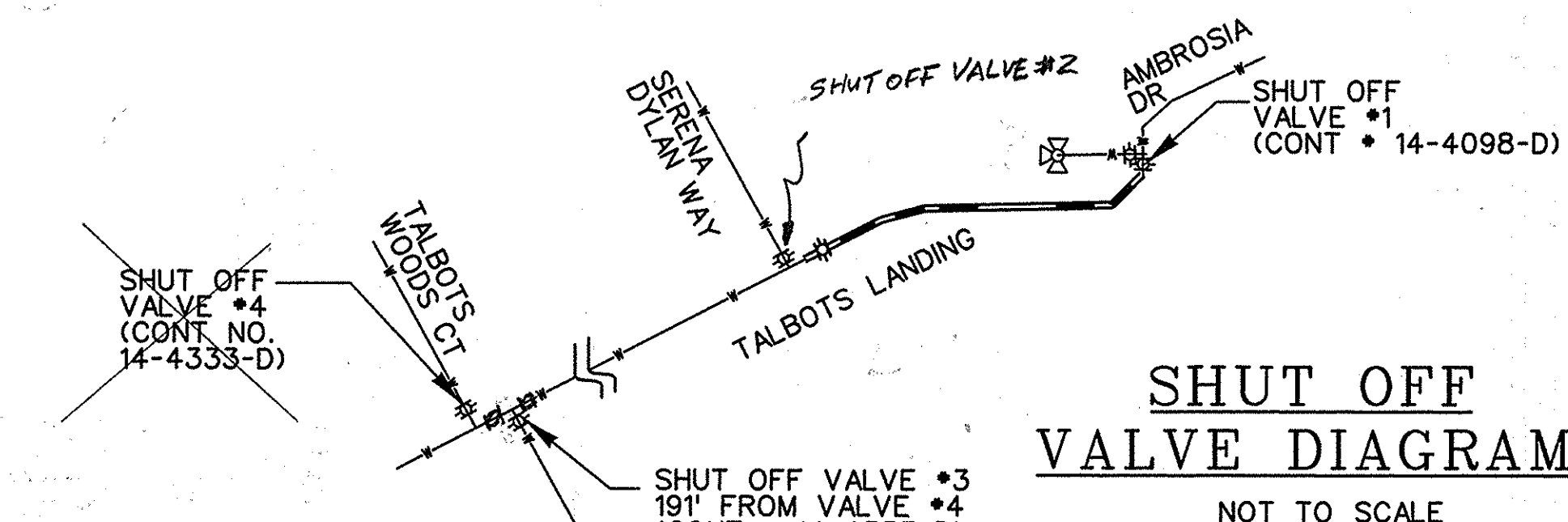
ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 4

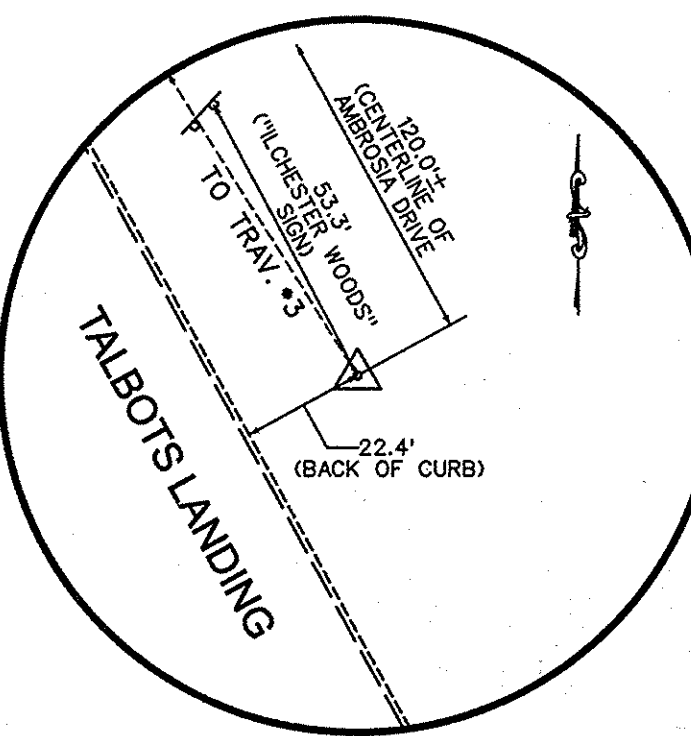


STA.	FITTING	NORTHING	EASTING
0+00	8" 1/8 HB TIE-IN	568111.99	1377158.65
0+10	8" V	568106.29	1377166.80
0+42	1" WHC	568087.89	1377192.87
1+03	8" 1/32 HB	568052.63	1377242.89
1+52	8" 1/32 HB	568016.94	1377275.70
1+63	1" WHC	568007.61	1377280.83
1+88	1" WHC	567984.53	1377293.51
3+52	8" 1/8 HB	567841.43	1377372.26
3+58	1" WHC	567835.42	1377391.45
3+98	8" 1/8 HB TIE-IN	567828.07	1377415.46

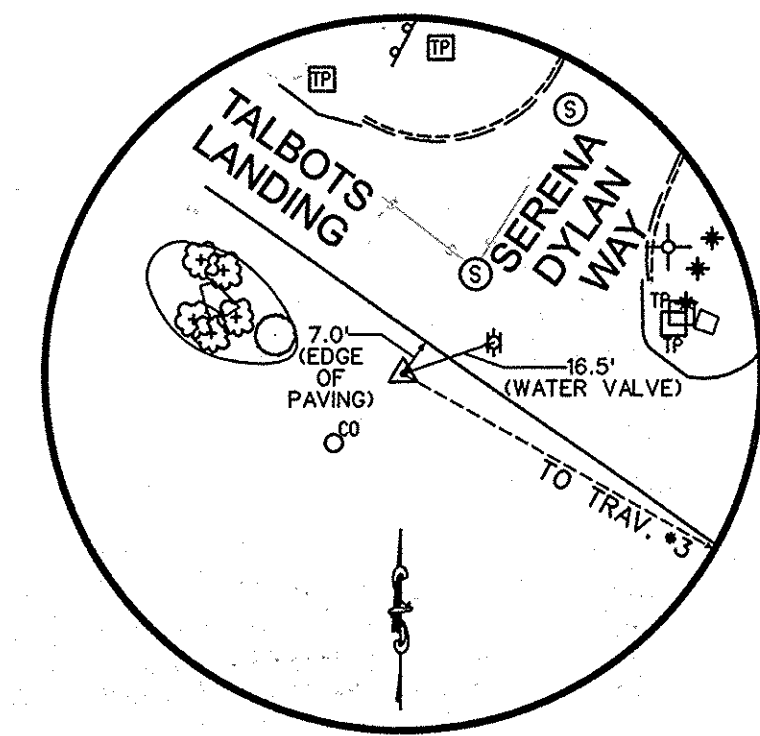
PLAN
SCALE: 1" = 50'



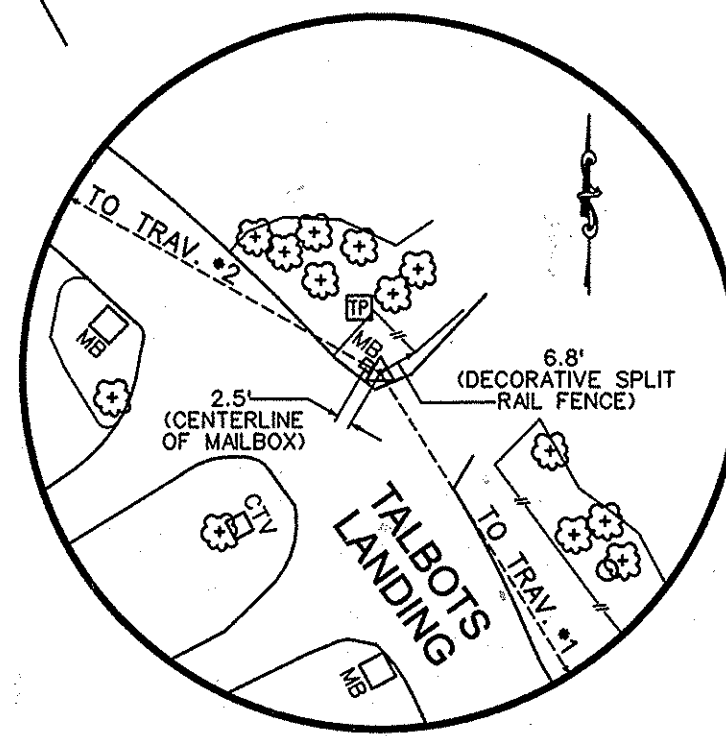
SHUT OFF VALVE DIAGRAM
NOT TO SCALE



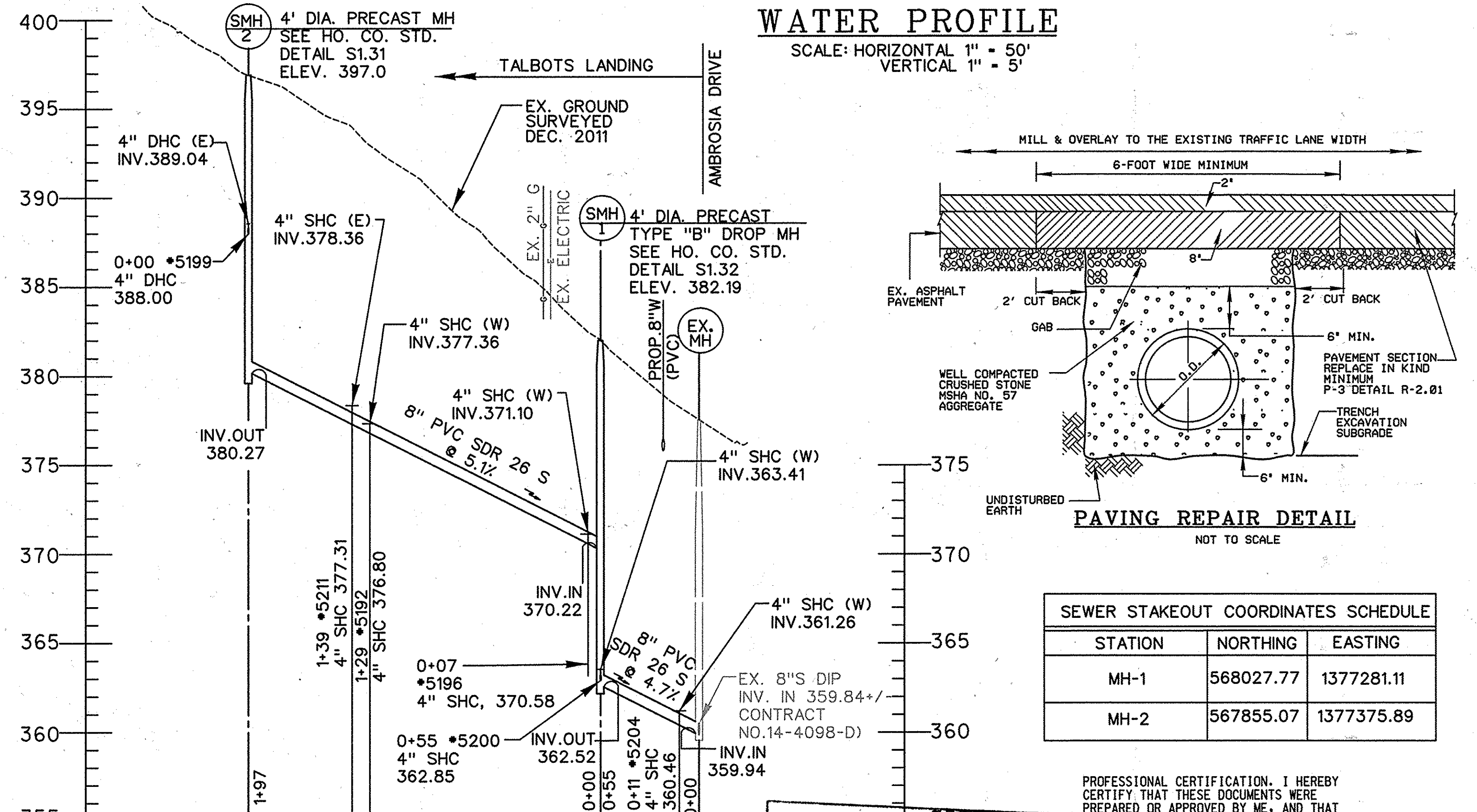
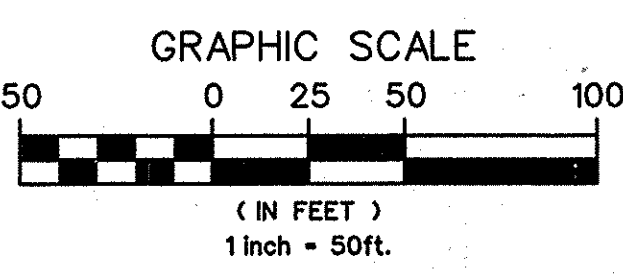
TRAVERSE #1
REBAR AND CAP
NORTHING = 567729.1227
EASTING = 1377485.5956
ELEVATION = 375.17



TRAVERSE #2
REBAR AND CAP
NORTHING = 568135.8949
EASTING = 1377117.1712
ELEVATION = 413.08

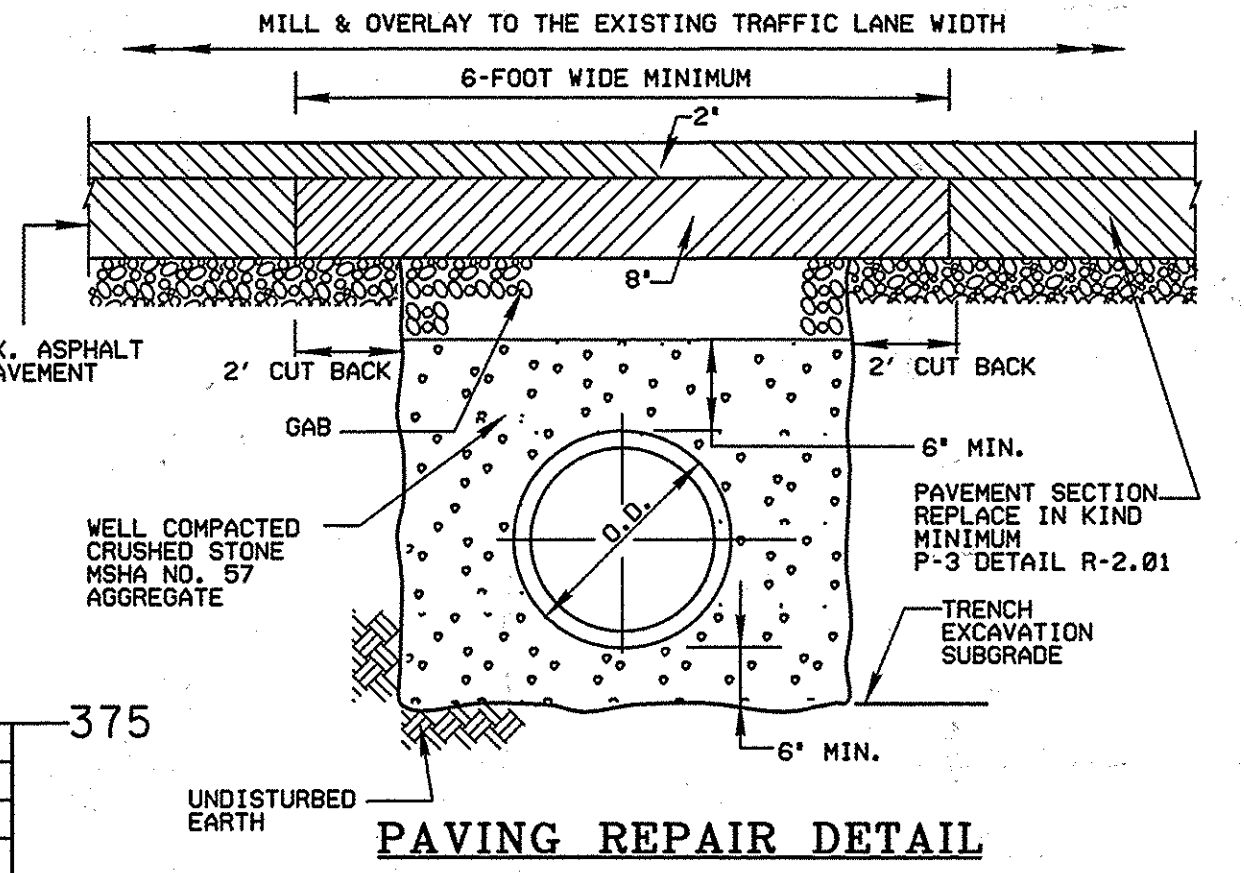


TRAVERSE #3
REBAR AND CAP
NORTHING = 568036.2900
EASTING = 1377293.1201
ELEVATION = 397.85



SEWER PROFILE
SCALE: HORIZONTAL 1" = 50'
VERTICAL 1" = 5'

WATER PROFILE
SCALE: HORIZONTAL 1" = 50'
VERTICAL 1" = 5'



STATION	NORTHING	EASTING
MH-1	568027.77	1377281.11
MH-2	567855.07	1377375.89

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FILE: W-2007-01071378.40 Drawings-0107137840_SHEET_2_W.dgn

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John A. ... DIRECTOR OF PUBLIC WORKS
... CHIEF, BUREAU OF UTILITIES

... CHIEF, BUREAU OF ENGINEERING
... CHIEF, UTILITY DESIGN DIVISION

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STATE OF MARYLAND
PROFESSIONAL ENGINEER

...

DES: GW	
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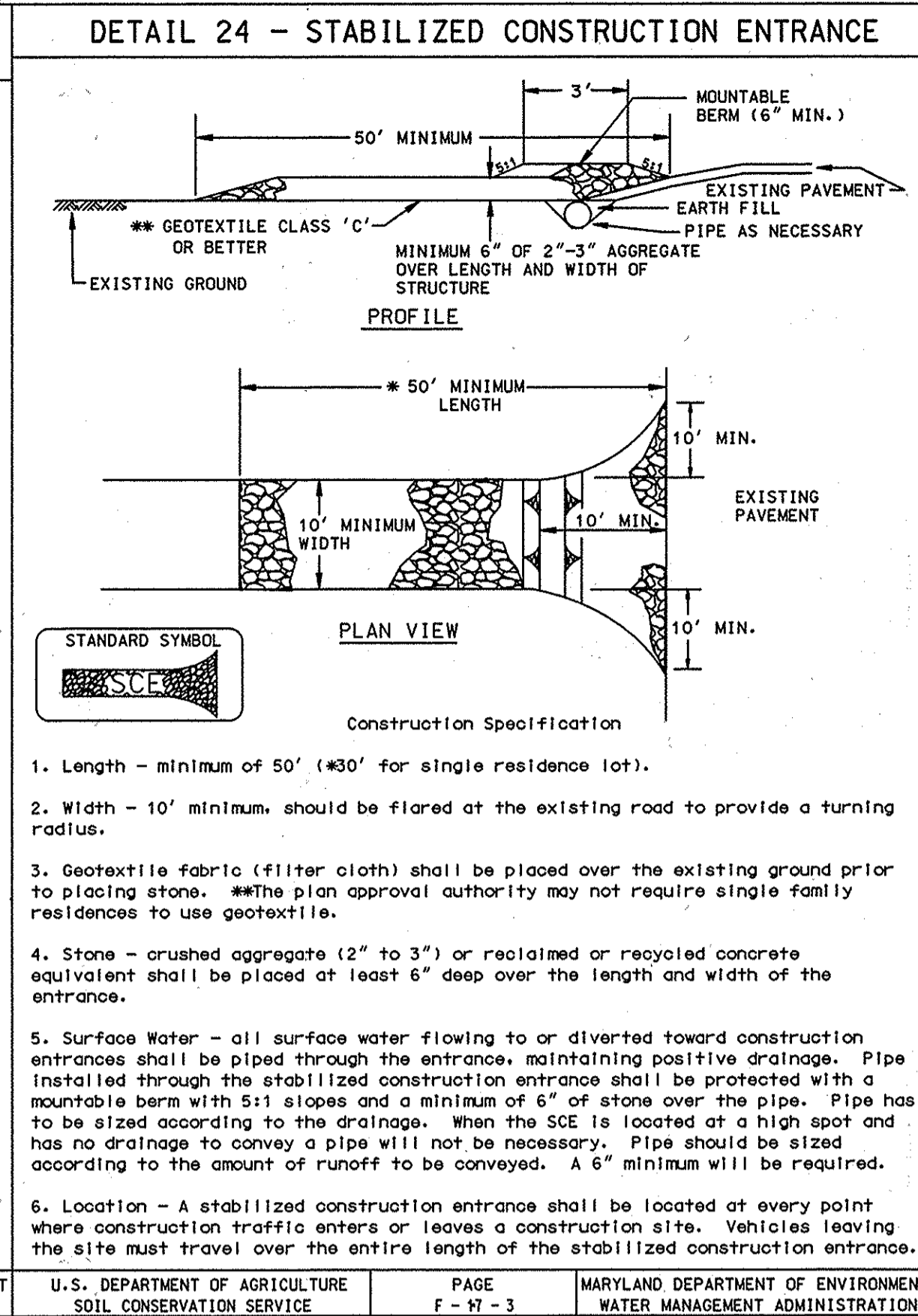
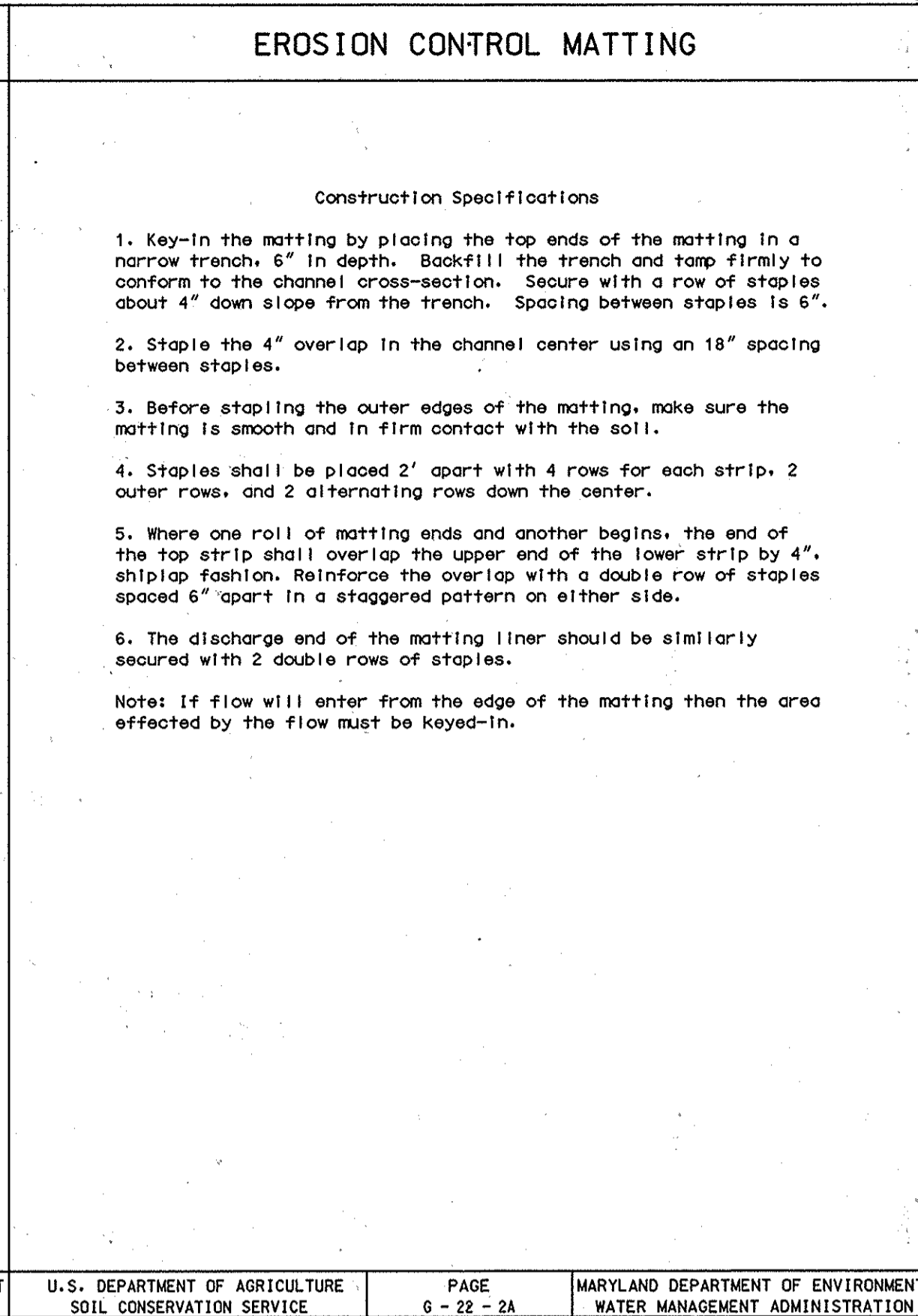
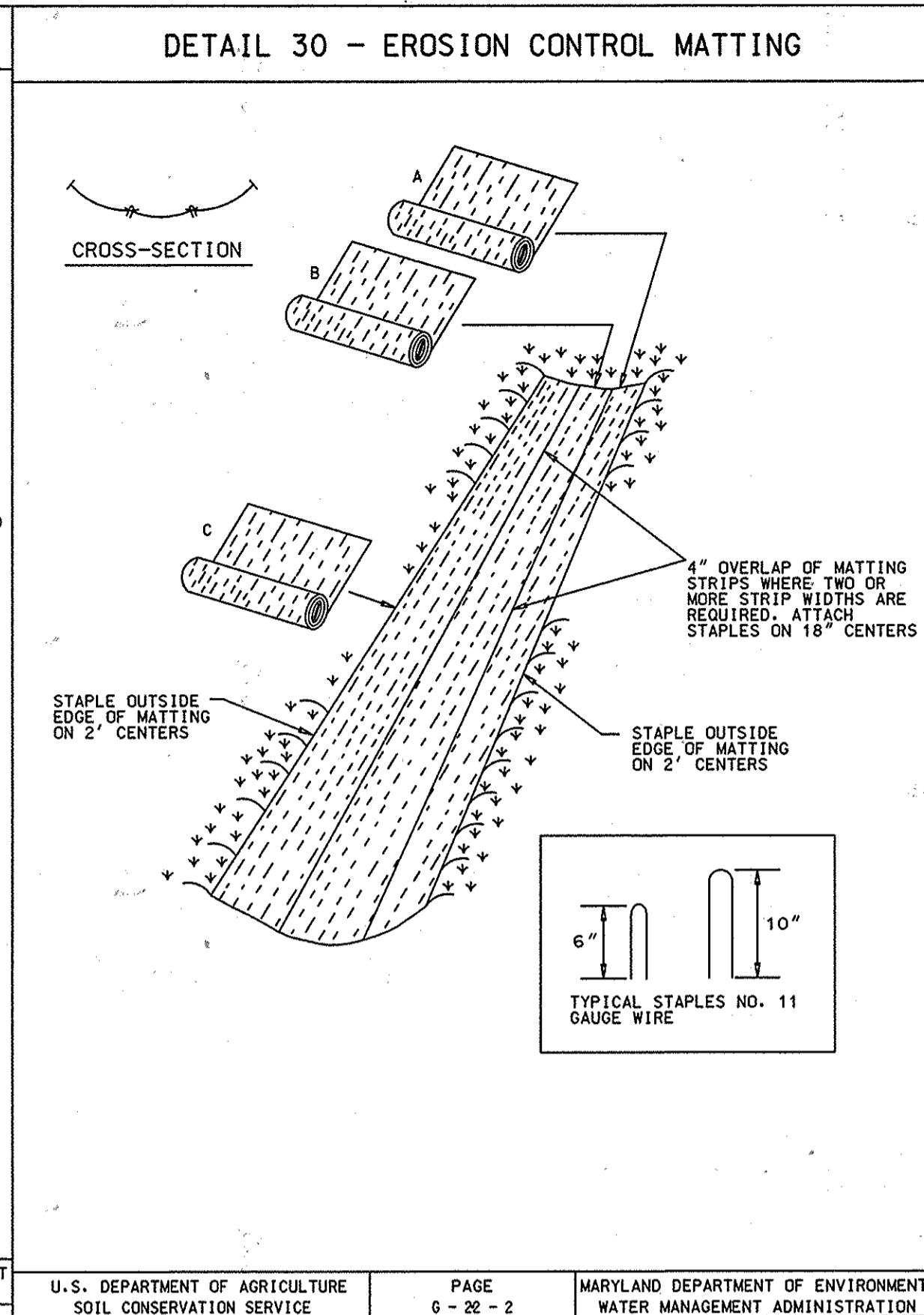
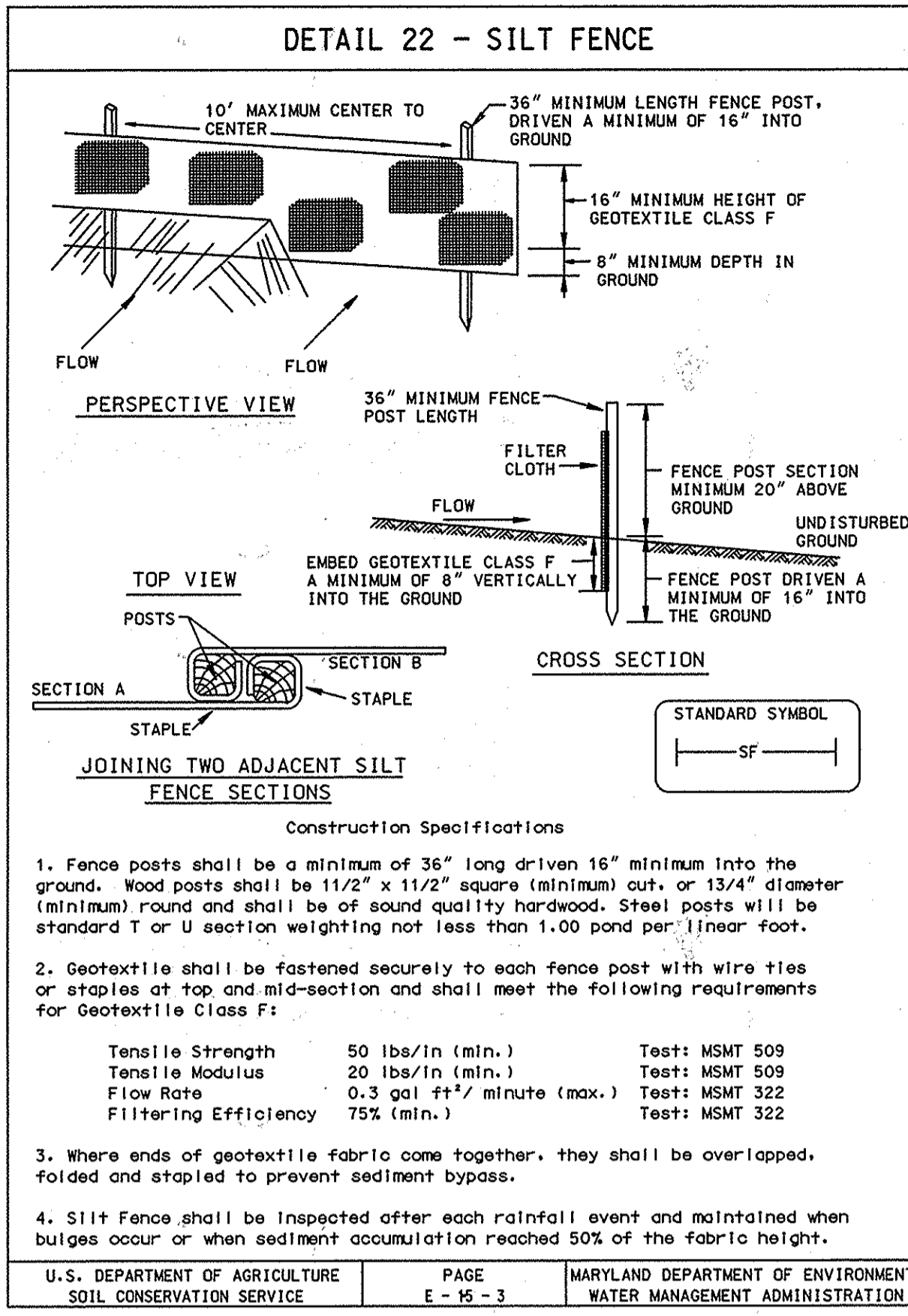
8" WATER MAIN & 8" SEWER PLAN AND PROFILE

TALBOTS LANDING ROUTINE WATER AND SEWER EXTENSION

CAPITAL PROJECT No. W-8698
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ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 4



SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT.
- LAYOUT ALIGNMENT AT SITE. (10 DAYS)
- INSTALL SEDIMENT CONTROL DEVICES AS SHOWN ON PLAN.
- EXCAVATE DITCH TO THE GRADE SPECIFIED ON THE PROFILE. INSTALL WATER MAIN AND BACK FILL TRENCH AND STABILIZE IN KIND (30 DAYS) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO 25' OF PIPE LENGTH OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- CLEAN UP CONSTRUCTION SITE. (1 DAY)
- REMOVE SEDIMENT CONTROL DEVICES AFTER PERMISSION IS GRANTED BY THE SEDIMENT CONTROL INSPECTOR. (1 DAY)

PERMANENT SEEDING NOTES

LIME
SOIL AMENDMENTS

A. GROUND AGRICULTURAL LIMESTONE (100 POUNDS OF GROUND LIMESTONE IS EQUIVALENT TO 75 POUNDS OF HYDRATED LIME OR 50 POUNDS OF BURNED LIME). THE CONTRACTOR WILL SPECIFY WHAT MATERIAL HE IS USING. LIME SHALL CONTAIN NOT LESS THAN 85% OF TOTAL CARBONATES, 50% PASS 100 MESH, 90% PASS 20 MESH.

B. LIME SHALL BE APPLIED SEPARATELY AND PRIOR TO THE APPLICATION OF ANY FERTILIZER OR SEED AND ONLY ON SEEDBEDS THAT HAVE PREVIOUSLY BEEN PREPARED AS PER THE SPECIFICATIONS. LIME SHALL BE INCORPORATED WITHIN 24 HRS FOLLOWING ITS APPLICATION. LIME SHALL BE WORKED INTO A DEPTH OF SIX (6) INCHES AFTER WHICH THE SEEDBED SHALL AGAIN BE PROPERLY GRADED AND DRESSED TO A SMOOTH FINISH.

LIMING PROCEDURES

A. LIME SHALL BE SPREAD AT A RATE OF 1.5 TONS PER ACRE AND INCORPORATED IN A MANNER THAT ACHIEVES UNIFORM DISTRIBUTION.

FERTILIZATION

MUST USE A BLENDED FERTILIZER WITH A N-P-K RATIO ON THE ORDER OF 1-3-2 SUCH AS 5-25-10 BLEND. A MINIMUM OF 50% OF THE NITROGEN MUST BE A SLOW RELEASE SOURCE OF NITROGEN.

SEED SELECTION & RATES

SEED MIXTURE FOR SPRING OR FALL SEEDING SHALL BE AS FOLLOWS:

HOWARD COUNTY RECREATION AND PARKS RIPARIAN SEED MIX

%	BOANICAL NAME	COMMON NAME	TYPE	IND.
10%	AGROSTIS ALBA	REDTOP	N/A	FACW
10%	ANDROPOGON BERARDII	BIG BLUESTEM	WARM SEASON FAC	
10%	ELYMUS RIPARIUS	RIVERBANK WILD RYE	COOL SEASON FACW	
10%	ELYMUS VIRGINICUS	VIRGINIA WILD RYE	COOL SEASON FACW	
45%	LOLIUM MULTIFLORUM	ANNUAL RYEGRASS	N/A	NI
10%	PANICUM VIRGATUM	SMITHGRASS	WARM SEASON FAC	
5%	CHAMAECRISTA FASCICULATE	PARTRIDGE PEA	LEGUME	

COMPLETE SEED MIX APPLIED AT A RATE OF 50 LBS/AC

SEED MIX FOR SUMMER SEEDING SHALL BE AS FOLLOWS:

50%	LOLIUM MULTIFLORUM	ANNUAL RYEGRASS
50%	SETARIA ITALICA	FOXTAIL MILLET

SEEDED AT 4.0 LBS. PER 1,000 SQ. FT.

SCHEDULE

SEED SHALL BE SOWED BETWEEN MARCH 15 TO MAY 15 OR AUGUST 15 TO OCTOBER 30.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: - APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT.).

SEEDING: - FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ FT.) FOR ANCHORING.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (410-313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
 - 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (SEC. G20.0) FOR PERMANENT SEEDINGS, SOD, TEMPORARY SEEDING AND MULCHING. TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:**

TOTAL AREA OF SITE	0.35	ACRES
AREA TO BE ROOFED OR PAVED	0.35	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.25	ACRES
TOTAL CUT	N/A	CU. YDS.
TOTAL FILL	N/A	CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION	N/A	
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF THE DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- CONTRACTOR SHALL PLACE EXCAVATED MATERIALS ON UPHILL SIDE OF TRENCH AND PLACE SILT FENCE ON DOWNHILL SIDE OF TRENCH.

AS-BUILT
DATE 1/15/2013

PLOTTED: 08/26 AM on Tuesday, July 10, 2012
BY: Gailina Wong, Division: P042 W-WW-Solid Waste Emp
FILE: M:\2007\01071378-40\Drawings\0107137840_SHEET 4_SED.dwg

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John J. ... 7/12/12
DIRECTOR OF PUBLIC WORKS DATE

Thomas E. Butler 7/12/12
CHIEF, BUREAU OF ENGINEERING DATE

... 7/11/12
CHIEF, UTILITY DESIGN DIVISION DATE

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

KCI TECHNOLOGIES

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
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STATE OF MARYLAND
GAILINA WONG
PROFESSIONAL ENGINEER
NO. 31363
EXPIRATION DATE: 1/16/2014

DES: GW					
DRN: CK					
CHK: TW					
DATE: MARCH 2012	BY	NO.	REVISION	DATE	

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

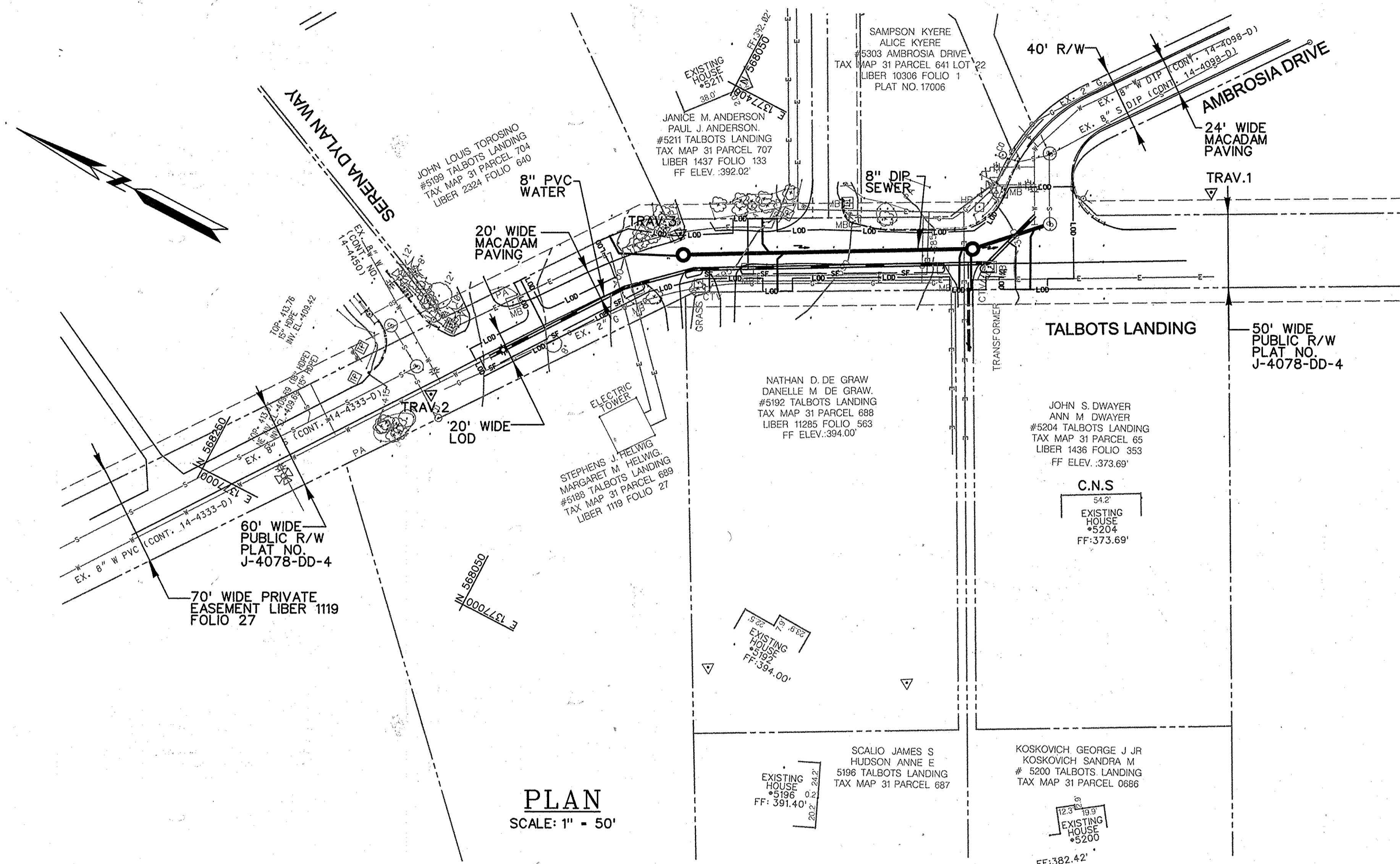
600' SCALE MAP NO. 31 BLOCK NO. 22

TALBOTS LANDING ROUTINE
WATER AND SEWER EXTENSION

CAPITAL PROJECT No. W-8698
CONTRACT No. 14-4750

ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 4



PLAN
SCALE: 1" = 50'

- NOTE: 1. SOIL INFORMATION IS BASED ON HOWARD COUNTY GIS SOIL MAP
 SoB: SASSAFRAS - LOAM, 2 TO 5 PERCENT SLOPES
 LaB: LAGORE - SILT LOAM, 3 TO 8 PERCENT SLOPES
 LaC: LAGORE - SILT LOAM, 8 TO 15 PERCENT SLOPES
2. TOPSOIL SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST EDITION OF THE SHA STANDARD SPECIFICATION OF CONSTRUCTION AND MATERIALS, SECTION 920 - LANDSCAPING MATERIALS.

LOT #	FROM	TO	DISTANCE	REMARKS
5204 SHC	SHC	EX. SMH	48.5	
	SHC	SMH *1	62.1	
	WHC	EX. SMH	51.7	
	WHC	SMH *1	54.0	
5196 / 5200	TWIN WHC	EX. SMH	74.7	
	"	SMH *1	34.3	
5200	SHC	SMH *1	35.6	
	SHC	WHC	7.0	
5196	SHC	WHC	6.0	
		SMH *1	35.0	
5211	SHC	SMH *2	55.2	
	SHC	WHC 5211	5.5	
	WHC	SMH *2	60.0	
	WHC	SHC 5192	65.0	
5192	SHC	SMH *2	66.6	
	SHC	WHC 5192	44.0	
	WHC	SMH *2	31.5	
	WHC	WHC 5211	65.0	
5199	SHC	MH *2	70.0	
	SHC	WHC 5180	43.0	
	WHC	M VALVE 0-10	68.6	
	WHC	SHC 5199	52.2	
5188	WHC	SMH *2	70.0	
	WHC	SHC 5199	43.0	
TEST STA. *2		SMH *1	37.6	
		EX. SMH	40.9	
5199	WHC	M VALVE 0-10	83.2	
	WHC	EX. VALVE TO SERENA DYLAN WAY	84.4	
	EX. VALVE 8"	M VALVE 0-10	3.7	

PLOTTED: 08:50 AM on Tuesday, July 10, 2012
 BY: Guohua Wang Division: P042 W-WW-Solid Waste Emp
 FILE: M:\2007\0071378_40\Drawings\007137840_SHEET_3_SOLID.dgn

AS-BUILT
DATE: 1/15/2013

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 31363 EXPIRATION DATE: 1/16/2014

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS CHIEF, BUREAU OF UTILITIES	 ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS 936 RIDGEBROOK ROAD SPARKS, MARYLAND 21152 TELEPHONE: (410) 316-7800 FAX: (410) 316-7818 WWW.KCI.COM	 STATE OF MARYLAND GUOHUA WANG PROFESSIONAL ENGINEER NO. 31363 7/10/2012	DES: GW DRN: CK CHK: TW DATE: MARCH 2012 BY: NO.	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	TALBOTS LANDING ROUTINE WATER AND SEWER EXTENSION CAPITAL PROJECT No. W-8698 CONTRACT No. 14-4750 ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 3 OF 4
DATE: 1-15-2013 3-7-13 REVISION:				600' SCALE MAP NO. 31 BLOCK NO. 22		